

WIREBONDED MULTICHIP MODULE

In the Claims:

Please cancel non-elected Claims 11-20 without prejudice.

Sub B 17 (amended) A multichip module comprising:

a first chip having opposing top and bottom surfaces and having bonding pads located on a perimeter of said top surface, each of said bonding pads operable for bonding a wire;

a second chip having opposing top and bottom surfaces and having bonding pads located on a perimeter of said top surface, each of said bonding pads operable for bonding a wire;

a first attach layer having an area equal to an area of said second chip bottom surface for coupling said first chip and said second chip, said first attach layer covering said each of said bonding pads on said first chip and having a thickness to provide electrical disconnection of said first chip wire bonds and said second chip, said first attach layer is applied to said second chip bottom surface prior to coupling said first chip and said second chip.

Sub B 18 (new) A multichip module, comprising:

a first chip having opposing top and bottom surfaces and having first bonding pads located on a perimeter of said top surface;

a wire having a bond to one of said first bonding pads;

a second chip having opposing top and bottom surfaces and positioned with said bottom surface of said second chip adjacent said top surface of said first chip;

a first attach layer between said top surface of said first chip and said bottom surface of said second chip and covering said wire bond, said first attach layer having an area substantially equal to the area of said second chip.

22. (new) The multichip module of Claim 21, further comprising a second attach layer adjacent to said bottom surface of said second chip.

23. (new) The multichip module of Claim 21, wherein said first attach layer is a thermosetting material.

24. (new) The multichip module of Claim 22, wherein said second attach layer is an inorganic material.

25. (new) The multichip module of Claim 21, wherein said first and second chips are approximately the same size.

26. (new) A multichip module, comprising:

a substrate having a plurality of contact pads;

a first chip having opposing top and bottom surfaces and having first bonding pads located on a perimeter of said top surface, said first chip mounted on said substrate;

a wire having a ball bond to one of said plurality of contact pads on said substrate and a bond to one of said first bonding pads;

a second chip having opposing top and bottom surfaces and positioned with said bottom surface of said second chip adjacent said top surface of said first chip;

a first attach layer between said top surface of said first chip and said bottom surface of said second chip and covering said wire bond to said one of said first bonding pads, said first attach layer having an area substantially equal to the area of said second chip.

27. (new) The multichip module of Claim 26, further comprising a second attach layer adjacent to said bottom surface of said second chip.